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10/823,265

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Tomonori Tsukagoshi

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EXAMINER

CHIEN, LUCY P

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/823,265

Applicant(s)

TSUKAGOSHI ET AL.

Examiner

Lucy P. Chien

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,33-37,44 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-32,38-43 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### **Election/Restriction**

Newly submitted claim 27-46 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The independent claim 27 claims a second optical compensation layer whereas the original claim 1 only claims one optical compensation film.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 33-37,44,45 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 27-32,39-43,46 will be examined.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 27-32,40,41** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim **1-5,10,13,14**, of copending Application No. 11293015. Although the conflicting claims are not identical, they are not patentably distinct from each other because

Claim 1 of the copending application anticipates Claim 27 of this application.

Claim 13 of the copending application anticipates 28 of this application.

Claim 2-5 of the copending application respectfully anticipates Claim 29-32 of this application.

Claim 15 of the copending application also anticipates 29 of this application.

Claim 10 of the copending application anticipates Claim 40 of this application

Claim 14 of the copending application anticipates Claim 41 of this application

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 27-29,31,40-43** are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (US 20020018162).

**Regarding Claim 27,28**

Suzuki et al discloses (Figure 21 and (Figure 22 which is a detailed configuration of the LC panel 232 of figure 21)) a liquid crystal display device having a microlens array (Figure 22, 242) provided on a luminous flux incidence side (Figure 22, where L1 is located is the incidence side), the liquid crystal display device comprising two optical compensation layer (Figure 21, 233,234) made of an uniaxial crystal which is an inorganic material (Page 20, [0227]) and having an optical axis inclined with respect to a liquid crystal panel surface (Page 20, [0227]), on a luminous flux incidence side (Figure 22, where L1 is located is the incidence side).

**Regarding Claim 29,**

Suzuki et al further discloses the inorganic material forming the optical compensation layer is uniaxial crystal. (Page 20, [0227]).

**Regarding Claim 31,**

Suzuki et al further discloses the inorganic material forming the optical compensation layer is crystal. (Page 20, [0227]).

**Regarding Claim 40,**

Suzuki et al discloses (Figure 20 and Figure 21) wherein the optical compensation layer has an outer size equal to the effective display area of the liquid crystal panel ((Figure 20, 224,224R,224G,224B) , (Figure 21, 232,233,234))

Regarding Claim 41,42,

Suzuki et al discloses (Figure 20, shows the overall configuration of a projection type liquid crystal display apparatus according the same embodiment as Figure 21,22) a light source (211,211a) a liquid crystal display device having a microlens array (Figure 22, 242) provided on a luminous flux incidence side (Figure 22, where L1 is located is the incidence side), as a spatial light modulator. An illuminating optical system (Figure 20, 212,213,) for guiding a luminous flux emitted from a light source to the liquid crystal display device and thus illuminating the liquid crystal display device, and an image-forming lens (Figure 20, 226) for forming an image of the liquid crystal display device. the liquid crystal display device comprising an optical compensation layer (Figure 21, 233,234) made of an uniaxial crystal which is an inorganic material (Page 20, [0227]) and having an optical axis inclined with respect to a liquid crystal panel surface (Page 20, [0227]), at least on one of a luminous flux incidence side (Figure 22, where L1 is located is the incidence side) and a luminous flux emission side of the liquid crystal panel (Figure 22, where 1b is located is the emission side).

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 30,32,43**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US 20020018162) in view of Nishida et al (US 6052168).

#### Regarding Claim 30,32,43

Suzuki et al does not disclose the refractive index range.

Nishida et al discloses (Column 5, Row 49-56) Wherein  $\Delta n \cdot d$ , which is the product of refractive index anisotropy  $\Delta$  and thickness  $d$  of the inorganic material forming the optical compensation layer, is 165 nm which is less than 640 nm.

It would have been obvious to one of ordinary skill in the art, at the time of the invention to modify Suzuki et al's display to include Nishida et al's refractive index range motivated by the desire to incline the liquid crystal, which the refractive-index anisotropy generates. Therefore, the retardation to the transmitted light of the incidence-side polarizing plate occurs in the LC layer by this means the permittivity is increased. Thus, enhancing the view angle characteristic.

**Claim 38,39,46**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US 20020018162)

Suzuki et al discloses the claimed invention except for the angle of inclination of at least one of the first and second optical compensation layer is approximately 75°-85° with respect to the liquid crystal panel surface. It would have been obvious to one

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having ordinary skill in the art at the time the invention was made to have the angle of inclination of at least one of the first and second optical compensation layer is approximately 75°-85° with respect to the liquid crystal panel surface, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.


### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucy P Chien  
Examiner  
Art Unit 2871

  
ANDREW SCHECHTER  
PRIMARY EXAMINER